

**REMARKS/ARGUMENTS**

The Applicants hereby thank the Examiner for the observations in the outstanding Final Office Action. Independent Claims 1, 9, and 15 have been previously amended; and dependent Claim 20 has been previously added to better encompass the full scope and breadth of the present invention, notwithstanding the Applicants' belief that the Claims would have been allowable as originally filed as well as previously amended.

The previously presented amendments are believed to be fully supported by the priority document, U.S. Provisional Patent Application Serial No. 60/520,752, entitled "Ring Interface for TV Programming Guide," filed on November 17, 2003, as well as the following documents having been incorporated by reference in the present application: U.S. Patent Application Serial No. 10/806,713, entitled "3-Dimensional Browsing and Selection Apparatus and Method," filed on March 23, 2004; U.S. Patent Application Serial No. 10/806,876, entitled "Candidate Data Selection and Display Apparatus and Method," filed on March 23, 2004; U.S. Patent Application Serial No. 10/806,832, entitled "Filter Criteria and Results Display Apparatus and Method," filed on March 23, 2004; U.S. Patent Application Serial No. 10/806,830, entitled "Interactive Program Guide with Preferred Items List Apparatus and Method," filed on March 23, 2004; U.S. Patent Application Serial No. 10/806,646, entitled "Display Filter Criteria and Results Display Apparatus and Method," filed on March 23, 2004; and U.S. Patent Application Serial No. 10/806,767, entitled "Multi-Source Programming Guide Apparatus and Method," filed on March 23, 2004.

The Applicants respectfully assert that no claim has been narrowed within the meaning of *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.* (Fed.Cir. November 29, 2000). The Claims are not herein further amended. Therefore, reconsideration of the present application in light of the previous amendment and these remarks is respectfully requested. However, should any remaining issues be outstanding, the Examiner is respectfully requested to telephone Mr. Thomas F. Lebens at (805) 781-2865 so that such issues may be expeditiously resolved.

## **I. Rejection of Claims 1-8 and 15-20 under 35 U.S.C. §103(a)**

Claims 1-8 and 15-20 stand rejected, under 35 U.S.C. § 103(a), as being unpatentable over Knudson et al. (US 7386871), in view of Ahmad et al. (US 6263507), and in further view of Shaya (US 2002/0161664). The Examiner concedes, “Neither Knudson nor Ahmad explicitly disclose providing a plurality of cascading filters for facilitating determination of a particular one of the discrete selectable audio/visual programs, the plurality of cascading filters being customizable for at least one user, wherein the plurality of cascading filters simultaneously considers content across the first plurality of the discrete selectable items of audio/video content and the second plurality of the discrete selectable items of audio/video content.” Independent Claims 1 and 15 have been previously amended to include the following limitations: “providing a plurality of cascading filters for facilitating determination of a particular one of the discrete selectable items of data, the plurality of cascading filters being customizable for each at least one user, wherein the plurality of cascading filters simultaneously considers content across a plurality of media[.]” The Applicants respectfully traverse these grounds for rejection on this basis.

With respect to the primary cited reference, Knudson merely discloses: “A program guide system is provided in which an interactive television program guide that is implemented at least partially on user television equipment receives program listings data and real-time data such as sports scores, news data, and the like. The real-time data may be stored in a database maintained by the program guide, so that the program guide may access the stored real-time data at a later time. Updated program listings information may be provided to the program guide as part of the data stream in which the real-time data is provided. Unique keys may be generated for the program listings data and real-time data associated with each live event. The keys may be compared at the program guide to determine which program listings correspond to which items of real-time data. A controllable ticker may be displayed on top of a television program on the user television equipment. The controllable ticker may be sponsored. Different types of real-time data may be assigned different expiration times. When data has expired it may be removed from the database.” (Abstract).

With respect to the secondary cited reference, Ahmad merely discloses: "The invention facilitates and enhances review of a body of information (that can be represented by a set of audio data, video data, text data or some combination of the three), enabling the body of information to be quickly reviewed to obtain an overview of the content of the body of information and allowing flexibility in the manner in which the body of information is reviewed. In a particular application of the invention, the content of audiovisual news programs is acquired from a first set of one or more information sources (e.g., television news programs) and text news stories are acquired from a second set of one or more information sources (e.g., on-line news services or news wire services). In such a particular application, the invention can enable the user to access the news stories of audiovisual news programs in a random manner so that the user can move quickly among news stories or news programs. The invention can also enable the user to quickly locate news stories pertaining to a particular subject. Additionally, when the user is observing a particular news story in a news program, the invention can identify and display related news stories. The invention can also enable the user to control the display of the news programs by, for example, speeding up the display, causing a summary of one or more news stories to be displayed, or pausing the display of the news stories. Additionally, the invention can indicate to the user which news story is currently being viewed, as well as which news stories have previously been viewed." (Abstract).

With respect to the tertiary cited reference, Shaya actually discloses: "... Yet another hybrid data processing model that may be employed combines collaborative and content-based filtering. FIG. 11 illustrates **a cascade of collaborative and content-based filters 1100** utilized in certain embodiments of the invention. **Cascade 1100** represents a novel approach to exploiting both social and content information that is particularly well suited to the present invention. With **this cascaded architecture 1100**, the collaborative filter 1102 is tuned to output predicted ratings 1103 **for many products** based on a current consumer's characterization profile 1107 and the knowledge regarding all consumers and **products contained in database 1101**. Ratings outputs 1103 then form the input to content-based filter 1104, which **selects products** from those inputs for which the **product features stored in the product features database 1105** match well with the user's aesthetic choices contained in the personal profile information. The **products selected by content-based filter 1104** comprise the final recommendations 1106 output by the **product recommendation engine**." (Para.

[0164]; Fig. 11) In essence, Shaya merely teaches using **a single cascade** of filters 1100 for recommending products, e.g., for online shopping of consumer goods, **not audio-video content via a signal transmission**, to consumers, wherein **the product information** is gleaned from a database 1101, **not via a signal transmission from a primary service provider as in the presently claimed invention**.

In contrast to Knudson, even in view of Ahmad, and even in further view of Shaya, the present invention comprises “***a plurality of cascading filters*** for facilitating determination of a particular one of the ***discrete selectable audio/visual programs, the plurality of cascading filters being customizable for at least one user, wherein the plurality of cascading filters simultaneously considers content across the first plurality of the discrete selectable items of audio/video content and the second plurality of the discrete selectable items of audio/video content***[.]” Shaya cannot simultaneously consider content across the first plurality of the discrete selectable items of audio/video content and the second plurality of the discrete selectable items of audio/video content by using only one cascade of filters. The single cascade of filters of Shaya cannot accomplish the result emanating from simultaneous consideration of content by a plurality of cascading filters as claimed in the present invention. In other words, Shaya processes the signals in series while the present invention processes the signals in parallel. As such, the present invention uses a distinct filter architecture involving ***a plurality of cascading filters***, rather than merely a single cascade, in order to ***simultaneously consider content, wherein the content comprises a plurality of discrete selectable items of audio/video content, wherein a first plurality of the discrete selectable items of audio/video content differ from a second plurality of the discrete selectable items of audio/video content with respect to a primary transmission service provider***.

Accordingly, the Applicants respectfully submit that Knudson et al. , in view of Ahmad et al., and even in further view of Shaya, does not teach, suggest, motivate, or otherwise obviate, in any other manner, the combination of elements and limitations, *inter alia*, in previously amended independent Claims 1 and 15, respectively reciting:

1. A method of **automatically displaying content to at least one user**, comprising:  
providing access to characterizing descriptors as individually correspond to a **plurality of discrete selectable items of data**;  
on a display comprising a two-dimensional display region:  
**simultaneously providing a plurality of discrete indicators within the two-dimensional display region for at least some of the discrete selectable items of data, which discrete indicators comprise at least a portion of the characterizing descriptors as corresponds to the discrete selectable items of data**;  
**providing a segregated display area within the two-dimensional display region**;  
automatically causing relative movement as between the segregated display area and the plurality of discrete indicators by changing position along a dimension of the two-dimensional display region of one of the segregated display area and the plurality of discrete indicators;  
**providing a plurality of cascading filters for facilitating determination of a particular one of the discrete selectable items of data, the plurality of cascading filters being customizable for each at least one user, wherein the plurality of cascading filters simultaneously considers content across a plurality of media**; and  
automatically displaying additional content as corresponds to the characterizing descriptors for a given one of the discrete indicators as interacts in a predetermined way, at least in part, with the segregated display area.  
[emphasis added]
15. An interactive **automatic data display system for at least one user**, comprising:  
characterizing descriptors as individually correspond to a **plurality of discrete selectable items of data**;  
**a plurality of cascading filters for facilitating determination of a particular one of the discrete selectable items of data, the plurality of cascading filters being customizable for each at least one user, wherein the plurality of cascading filters simultaneously considers content across a plurality of media**; and  
control circuitry that:  
**displays a plurality of discrete indicators within a two-dimensional display region for at least some of the discrete selectable items of data, which discrete indicators comprise at least a portion of the characterizing descriptors as corresponds to the discrete selectable items of data**;  
**provides a segregated display area within the two-dimensional display region**;  
**automatically causes relative movement as between the segregated display area and the plurality of discrete indicators by changing position along a dimension of the two-dimensional display region of one of the segregated display area and the plurality of discrete indicators**;  
automatically displays additional content as corresponds to the characterizing descriptors for a given one of the discrete indicators as interacts in a predetermined way, at least in part, with the segregated display area.  
[emphasis added]

Consequently, Claims 2-8 and 16-19 now subsume the limitations of their respective base claims by dependency thereto.

Thus, the Applicants respectfully submit that Claims 1-8 and 15-20 have not been taught, suggested, motivated, or otherwise obviated by the cited art. Therefore, the Applicants respectfully request that the grounds for rejection on this basis are withdrawn and that Claims 1-8 and 15-20 are passed to allowance in due course.

## **II. Rejection of Claims 9-14 under 35 U.S.C. §103(a)**

Claims 9-14 stand rejected, under 35 U.S.C. § 103(a), as being unpatentable over Knudson et al. (US 7386871), in view of Ahmad et al. (US 6263507), and in further view of Shaya (US 2002/0161664). The Examiner concedes, “Neither Knudson nor Ahmad explicitly disclose providing a plurality of cascading filters for facilitating determination of a particular one of the discrete selectable audio/visual programs, the plurality of cascading filters being customizable for at least one user, wherein the plurality of cascading filters simultaneously considers content across the first plurality of the discrete selectable items of audio/video content and the second plurality of the discrete selectable items of audio/video content.” Independent Claim 9 had been previously amended to include the following limitations: “providing a plurality of cascading filters for facilitating determination of a particular one of the discrete selectable items of data, the plurality of cascading filters being customizable for each at least one user, wherein the plurality of cascading filters simultaneously considers content across a plurality of media[.]” The Applicants respectfully traverse these grounds for rejection on this basis.

With respect to the primary cited reference, Knudson merely discloses: “A program guide system is provided in which an interactive television program guide that is implemented at least partially on user television equipment receives program listings data and real-time data such as sports scores, news data, and the like. The real-time data may be stored in a database maintained by the program guide, so that the program guide may access the stored real-time data at a later time. Updated program listings information may be provided to the program guide as part of the data stream in which the real-time data is provided. Unique keys may be generated for the program listings data and real-time data associated with each live event. The keys may be compared at the program guide to determine which program listings correspond to which items of real-time data. A controllable ticker may be displayed on top of a television program on the user television equipment. The controllable ticker may be sponsored. Different types of real-time data may be assigned different expiration times. When data has expired it may be removed from the database.” (Abstract).

With respect to the secondary cited reference, Ahmad merely discloses: “The invention facilitates and enhances review of a body of information (that can be represented by a set of audio data, video data, text data or some combination of the three), enabling the body of information to be quickly reviewed to obtain an overview of the content of the body of information and allowing flexibility in the manner in which the body of information is reviewed. In a particular application of the invention, the content of audiovisual news programs is acquired from a first set of one or more information sources (e.g., television news programs) and text news stories are acquired from a second set of one or more information sources (e.g., on-line news services or news wire services). In such a particular application, the invention can enable the user to access the news stories of audiovisual news programs in a random manner so that the user can move quickly among news stories or news programs. The invention can also enable the user to quickly locate news stories pertaining to a particular subject. Additionally, when the user is observing a particular news story in a news program, the invention can identify and display related news stories. The invention can also enable the user to control the display of the news programs by, for example, speeding up the display, causing a summary of one or more news stories to be displayed, or pausing the display of the news stories. Additionally, the invention can indicate to the user which news story is currently being viewed, as well as which news stories have previously been viewed.” (Abstract).

With respect to the tertiary cited reference, Shaya actually discloses: “... Yet another hybrid data processing model that may be employed combines collaborative and content-based filtering. FIG. 11 illustrates *a cascade of collaborative and content-based filters 1100* utilized in certain embodiments of the invention. **Cascade 1100** represents a novel approach to exploiting both social and content information that is particularly well suited to the present invention. With **this cascaded architecture 1100**, the collaborative filter 1102 is tuned to output predicted ratings 1103 **for many products** based on a current consumer's characterization profile 1107 and the knowledge regarding all consumers and **products contained in database 1101**. Ratings outputs 1103 then form the input to content-based filter 1104, which **selects products** from those inputs for which the **product features stored in the product features database 1105** match well with the user's aesthetic choices contained in the personal profile information. The **products selected by content-based filter 1104** comprise the final recommendations 1106 output by the **product recommendation engine**.” (Para.

[0164]; Fig. 11) In essence, Shaya merely teaches using **a single cascade** of filters 1100 for recommending products, e.g., for online shopping of consumer goods, **not audio-video content via a signal transmission**, to consumers, wherein **the product information** is gleaned from a database 1101, **not via a signal transmission from a primary service provider as in the presently claimed invention**.

In contrast to Knudson, even in view of Ahmad, and even in further view of Shaya, the present invention comprises “***a plurality of cascading filters*** for facilitating determination of a particular one of the *discrete selectable audio/visual programs*, ***the plurality of cascading filters being customizable for at least one user, wherein the plurality of cascading filters simultaneously considers content across the first plurality of the discrete selectable items of audio/video content and the second plurality of the discrete selectable items of audio/video content***[.]” Shaya cannot simultaneously consider content across the first plurality of the discrete selectable items of audio/video content and the second plurality of the discrete selectable items of audio/video content by using only one cascade of filters. The single cascade of filters of Shaya cannot accomplish the result emanating from simultaneous consideration of content by a plurality of cascading filters as claimed in the present invention. In other words, Shaya processes the signals in series while the present invention processes the signals in parallel. As such, the present invention uses a distinct filter architecture involving ***a plurality of cascading filters***, rather than merely a single cascade, in order to ***simultaneously consider content, wherein the content comprises a plurality of discrete selectable items of audio/video content, wherein a first plurality of the discrete selectable items of audio/video content differ from a second plurality of the discrete selectable items of audio/video content with respect to a primary transmission service provider***.

Accordingly, the Applicants respectfully submit that Knudson et al. , in view of Ahmad et al., and even in further view of Shaya, does not teach, suggest, motivate, or otherwise obviate, in any other manner, the combination of elements and limitations, *inter alia*, in previously amended independent Claim 9, reciting:

9. A method of **automatically displaying content to at least one user**, comprising:  
providing access to characterizing descriptors as individually correspond to a plurality of discrete selectable items of data;  
providing a plurality of user-selectable characterizing descriptor filter criteria;  
on a display comprising a two-dimensional display region:  
**simultaneously providing a plurality of discrete indicators within the two-dimensional display region for at least a portion of the discrete selectable items of data as corresponds to a present selection of a characterizing descriptor filter criterion, which discrete indicators comprise at least a portion of the characterizing descriptors as corresponds to the discrete selectable items of data;**  
**providing a segregated display area within the two-dimensional display region;**  
automatically causing relative movement as between the segregated display area and the plurality of discrete indicators by changing position along a dimension of the two-dimensional display region of one of the segregated display area and the plurality of discrete indicators;  
**providing a plurality of cascading filters for facilitating determination of a particular one of the discrete selectable items of data, the plurality of cascading filters being customizable for each at least one user, wherein the plurality of cascading filters simultaneously considers content across a plurality of media;**  
**and**  
automatically displaying additional content as corresponds to the characterizing descriptors for a given one of the discrete indicators as interacts in a predetermined way, at least in part, with the segregated display area.  
[emphasis added]

Consequently, Claims 10-14 now subsume the limitations of their respective base claims by dependency thereto.

Thus, the Applicants respectfully submit that Claims 9-14 have not been taught, suggested, motivated, or otherwise obviated by the cited art. Therefore, the Applicants respectfully request that the grounds for rejection on this basis are withdrawn and that Claims 9-14 are passed to allowance in due course.

## CONCLUSION

Accordingly, independent Claims 1, 9, and 15 have been previously amended; and new dependent Claim 20 has been previously added to better encompass the full scope and breadth of the present invention, notwithstanding the Applicants' belief that the Claims would have been allowable as originally filed as well as previously amended. The Applicants respectfully reassert that no claim has been narrowed within the meaning of *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.* (Fed.Cir. November 29, 2000). Therefore, reconsideration of the present application in light of these remarks is respectfully requested. *The Examiner is further cordially invited to telephone Mr. Thomas F. Lebens for any reason which would advance allowance of the pending claims.* In the event that any additional fees become due or payable, the Examiner is authorized to charge USPTO Deposit Account No. 06-1135 accordingly.

Respectfully submitted,

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